

FIG. 2

09518495-030300

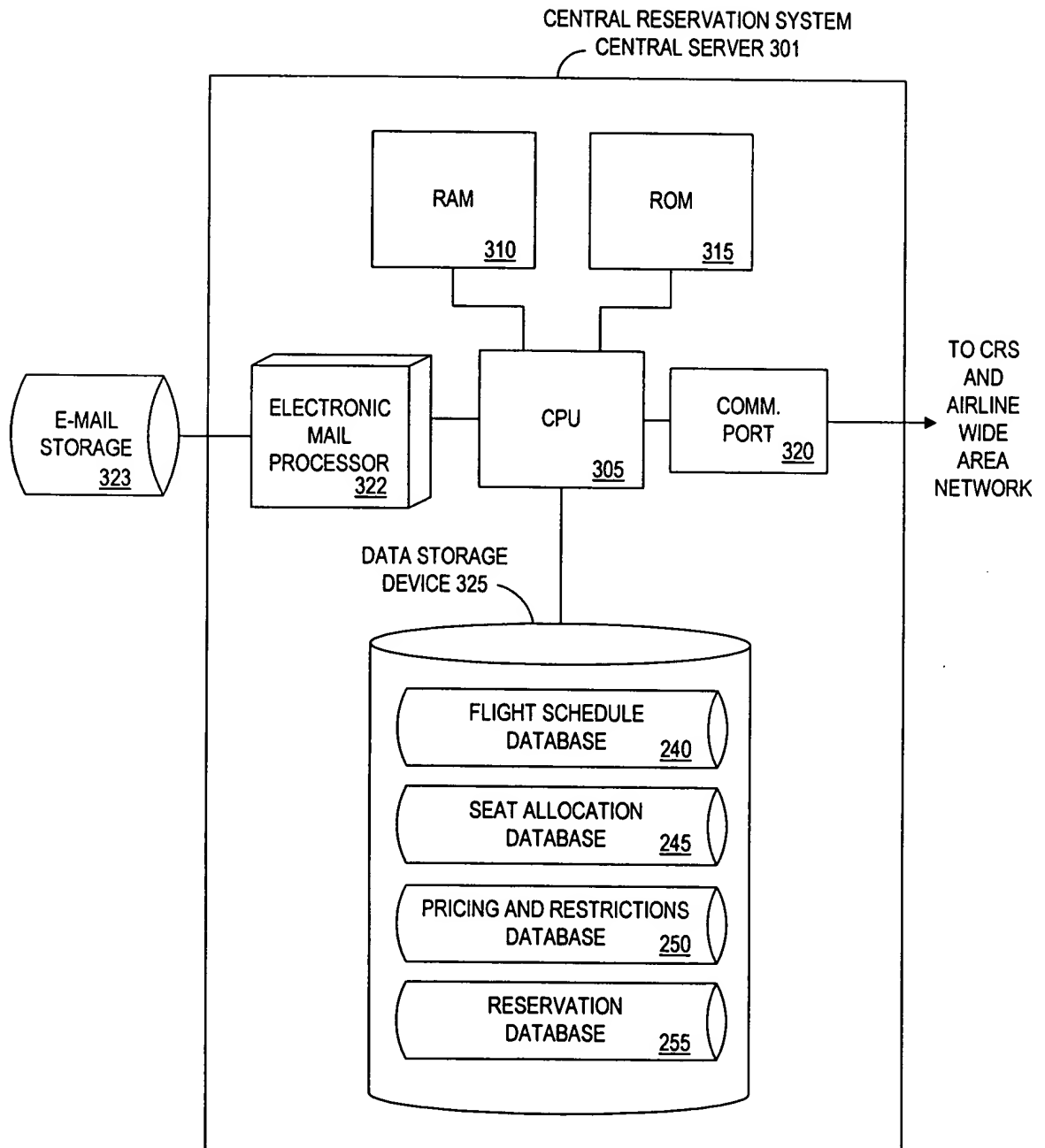


FIG. 3

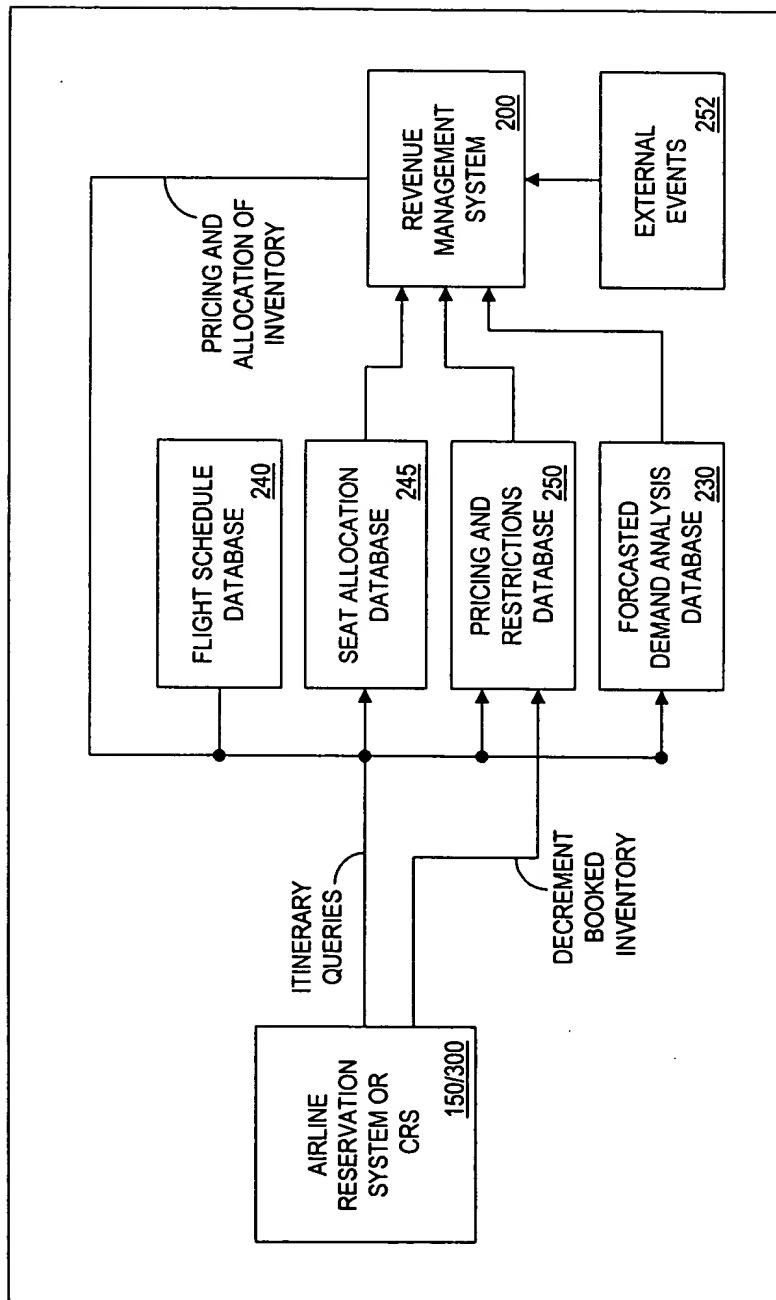


FIG. 4

09518495-030300

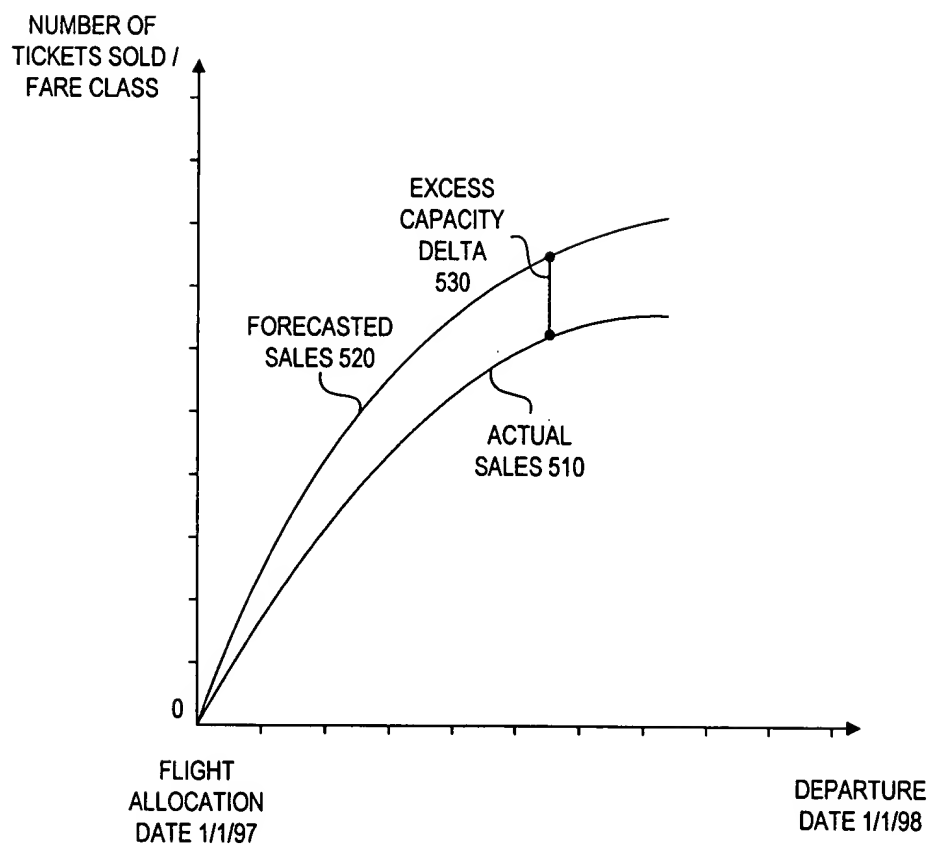


FIG. 5

FORECASTED DEMAND ANALYSIS DATABASE 230



FLIGHT NUMBER	DEPARTURE DATE	ORIGINATING CITY	DESTINATION CITY	PRICE	CLASS	ACTUAL QUANTITY BOOKED	EXPECTED QUANTITY BOOKED
1234	3/3/97	NEW YORK (JFK)	LOS ANGELES (LAX)	\$349.00	Y	40	70
1234	3/3/97	NEW YORK (JFK)	LOS ANGELES (LAX)	\$339.00	Y	65	90
1234	3/3/97	NEW YORK (JFK)	LOS ANGELES (LAX)	\$329.00	Y	95	125
1234	3/3/97	NEW YORK (JFK)	LOS ANGELES (LAX)	\$409.00	K	7	20
1234	3/3/97	NEW YORK (JFK)	LOS ANGELES (LAX)	\$399.00	K	40	60

FIG. 6

FLIGHT SCHEDULE DATABASE 240

ORIGINATING AIRPORT	705	DESTINATION AIRPORT	710	DATE	715	TIME OF DEPARTURE	720	TIME OF ARRIVAL	725	AIRLINE	730	FLIGHT NUMBER	735	VIA	740
NEW YORK (JFK)		LOS ANGELES (LAX)		3/3/97		9:00 AM EST		11:00 AM PST		AA		1234		NON STOP	
NEW YORK (JFK)		LOS ANGELES (LAX)		3/3/97		10:30 AM EST		12:30 PM PST		AA		4567		ONE STOP	
NEW YORK (JFK)		LOS ANGELES (LAX)		3/3/97		1:30 PM EST		7:00 PM PST		AA		2345		NON STOP	
NEW YORK (JFK)		LOS ANGELES (LAX)		3/3/97						AA		A3467			
NEW YORK (JFK)		LOS ANGELES (LAX)		3/3/97		4:00 PM EST		6:30 PM PST		AA		9876		NON STOP	
NEW YORK (JFK)		LOS ANGELES (LAX)		3/3/97						UNITED		A4237			

FIG. 7

PRICING AND RESTRICTIONS DATABASE 250



FLIGHT NUMBER 905	DATE 910	INVENTORY K PRICE 915	INVENTORY K RESTRICTION 920	INVENTORY Y PRICE 925	INVENTORY Y RESTRICTION 930
1234	3/3/97	\$399.00	NON STOP	\$339.00	NON STOP
4567	3/3/97	\$329.00	ONE STOP	\$369.00	ONE STOP
A3467	3/3/97	\$209.00	ONE STOP	\$209.00	ONE STOP

FIG. 9

RESERVATION DATABASE 255



FLIGHT NUMBER <u>1005</u>	ORIGINATING AIRPORT/ DESTINATION AIRPORT <u>1010</u>	CARRIER <u>1015</u>	CLASS <u>1020</u>	PRICE <u>1025</u>	PASSENGER NAME RECORD <u>1030</u>
1234	(JFK) - (LAX)	AMERICAN	K	\$399.00	XXXXX
A3467	(JFK) - (LAX)	AMERICAN	N/A	\$209.00	XXXXX

FIG. 10

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graph TD
    1100[AIRLINE RMS ANALYZES ROUTE BASED INFORMATION STORED IN THE FORECASTED DEMAND ANALYSIS DATABASE INCLUDING: HISTORICAL DEMAND AND PRICING DATA PER FLIGHT AND DETERMINES HOW MANY FLIGHTS TO OFFER FOR A SPECIFIC ROUTE ON A DAY TO DAY BASIS] --> 1110[RMS TRANSMITS NUMBER OF FLIGHTS TO BE OFFERED, DATE OF FLIGHTS TO BE OFFERED, O/D PAIR, AND TIME PERIODS OF EACH FLIGHT TO AIRLINE SCHEDULING SYSTEM]
    1110 --> 1115[AIRLINE SCHEDULING SYSTEM CREATES FLIGHT RECORDS FOR EACH FLIGHT INCLUDING: FLIGHT NUMBER, O/D PAIR, DEPARTURE/ ARRIVAL TIMES AND DATE]
    1115 --> 1120[RMS FURTHER INSTRUCTS SCHEDULING SYSTEM TO CREATE A SPECIAL FARE LISTING FOR THAT ROUTE ON THAT DAY WITH THE SAME FLIGHT INFORMATION EXCLUDING AN ACTUAL FLIGHT NUMBER AND DEPARTURE/ARRIVAL TIMES]
    1120 --> 1125[AIRLINE SCHEDULING SYSTEM CREATES A SPECIAL FARE LISTING RECORD FOR THAT FLIGHT ON THAT DATE INCLUDING ALL FLIGHT INFORMATION EXCEPT DEPARTURE/ARRIVAL TIMES AND AN ACTUAL FLIGHT NUMBER. SPECIAL FLIGHT LISTING NUMBER IS SPECIFIED BY AN "A" IN FRONT OF THE NUMBER]
    1125 --> B((B))
    B --> 1118

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FIG. 11A

B



FIG. 11B

09518495 0307000

051349-030300

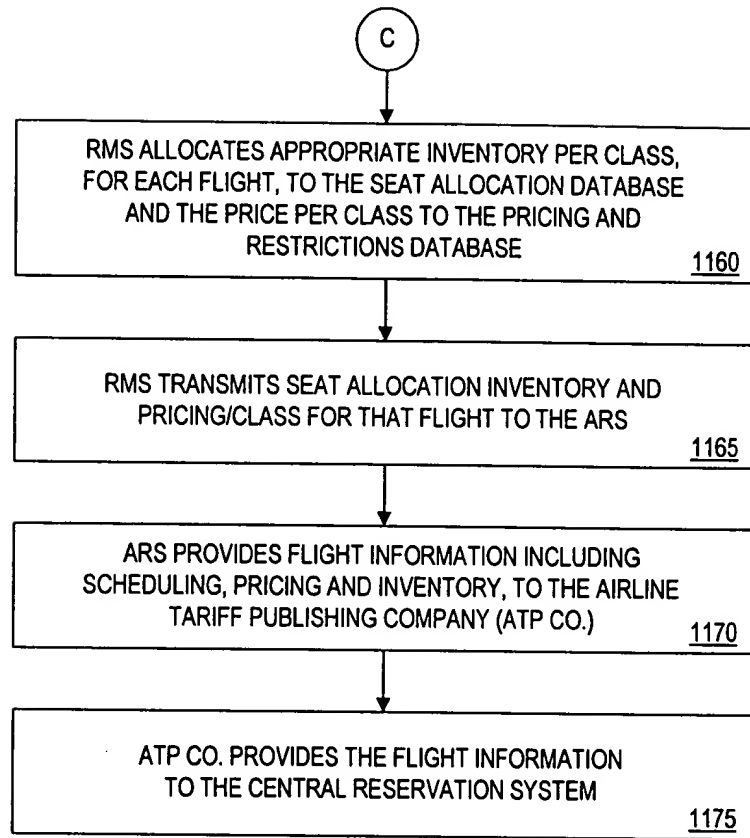


FIG. 11C

09518495-030300

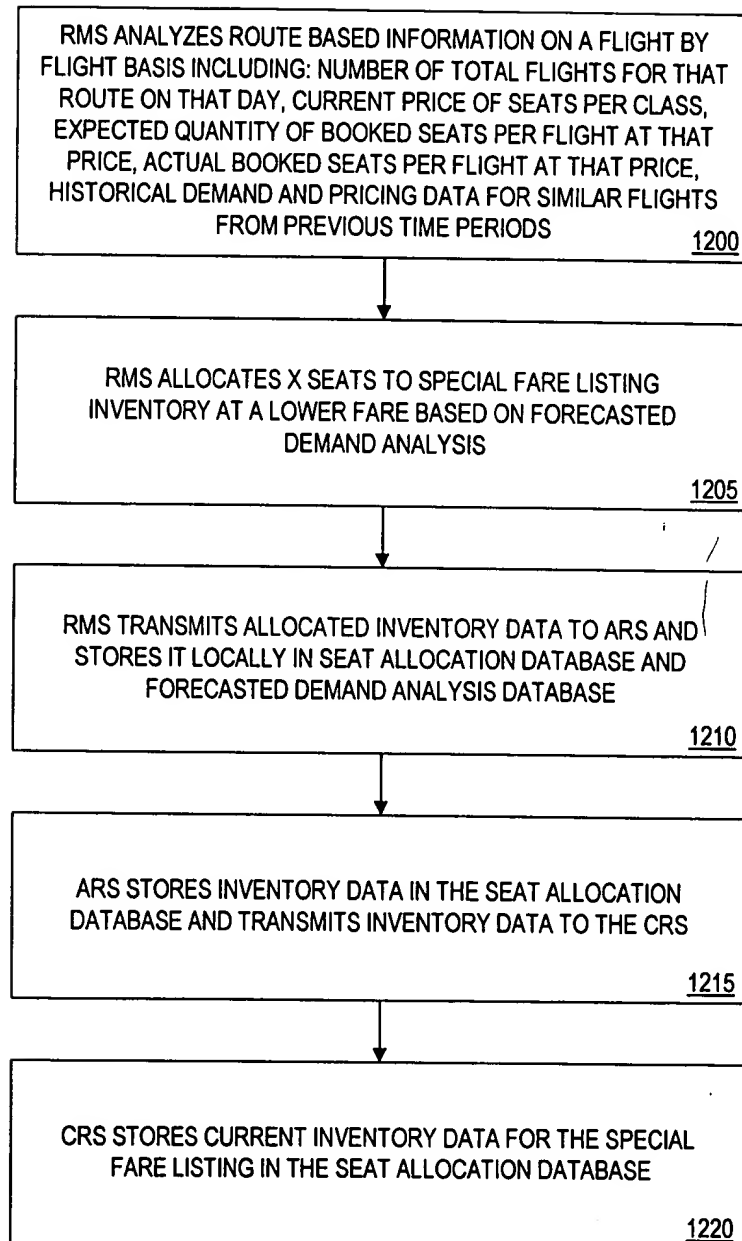
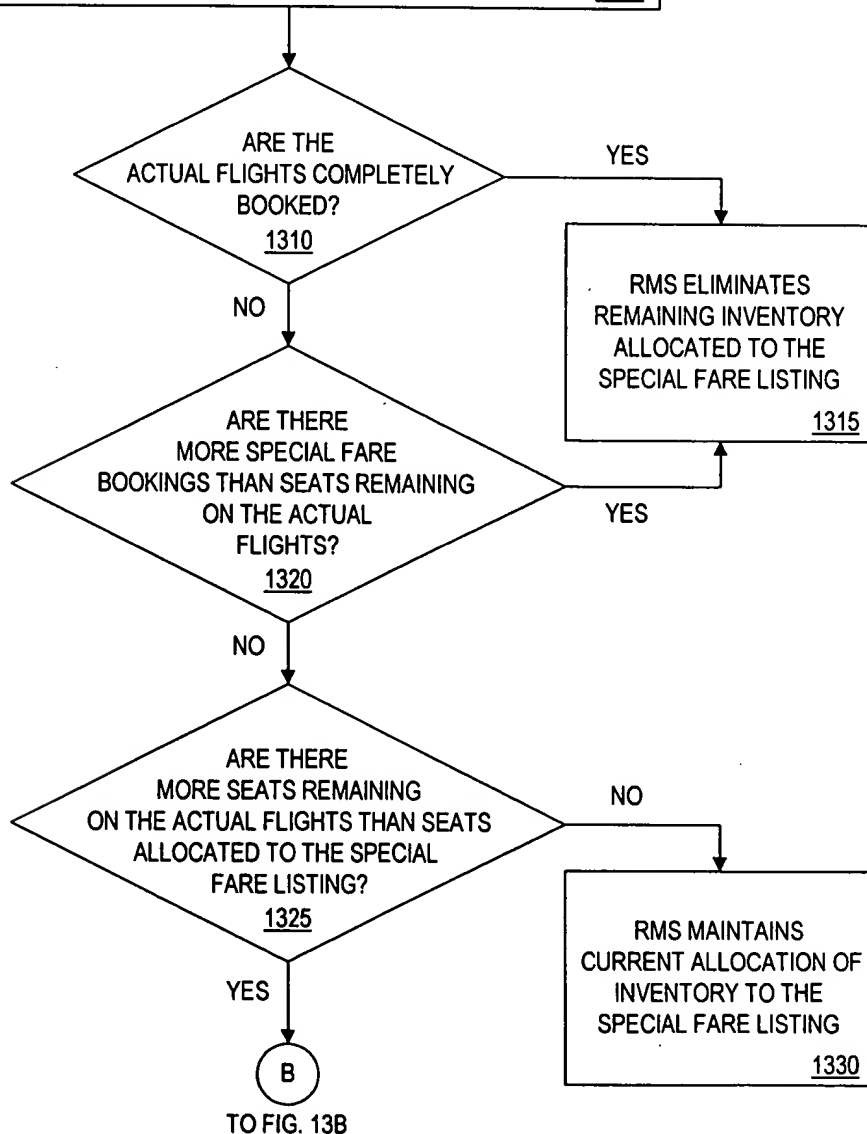


FIG. 12

RMS ANALYZES FLIGHT INFORMATION STORED IN
FORECASTED DEMAND ANALYSIS DATABASE INCLUDING:
EXPECTED VS. ACTUAL QUANTITY OF SEATS BOOKED ON ACTUAL
FLIGHTS FOR A SPECIFIC ROUTE ON A SPECIFIC DAY 1300

RMS EXTRACTS NUMBER OF SEATS ALLOCATED TO
THE CORRESPONDING SPECIAL FARE LISTING FOR THAT
ROUTE ON THAT DAY



FROM FIG. 13A

B

RMS INCREASES SEATS ALLOCATED TO THE SPECIAL
FARE LISTING INVENTORY

1335

FIG. 13B

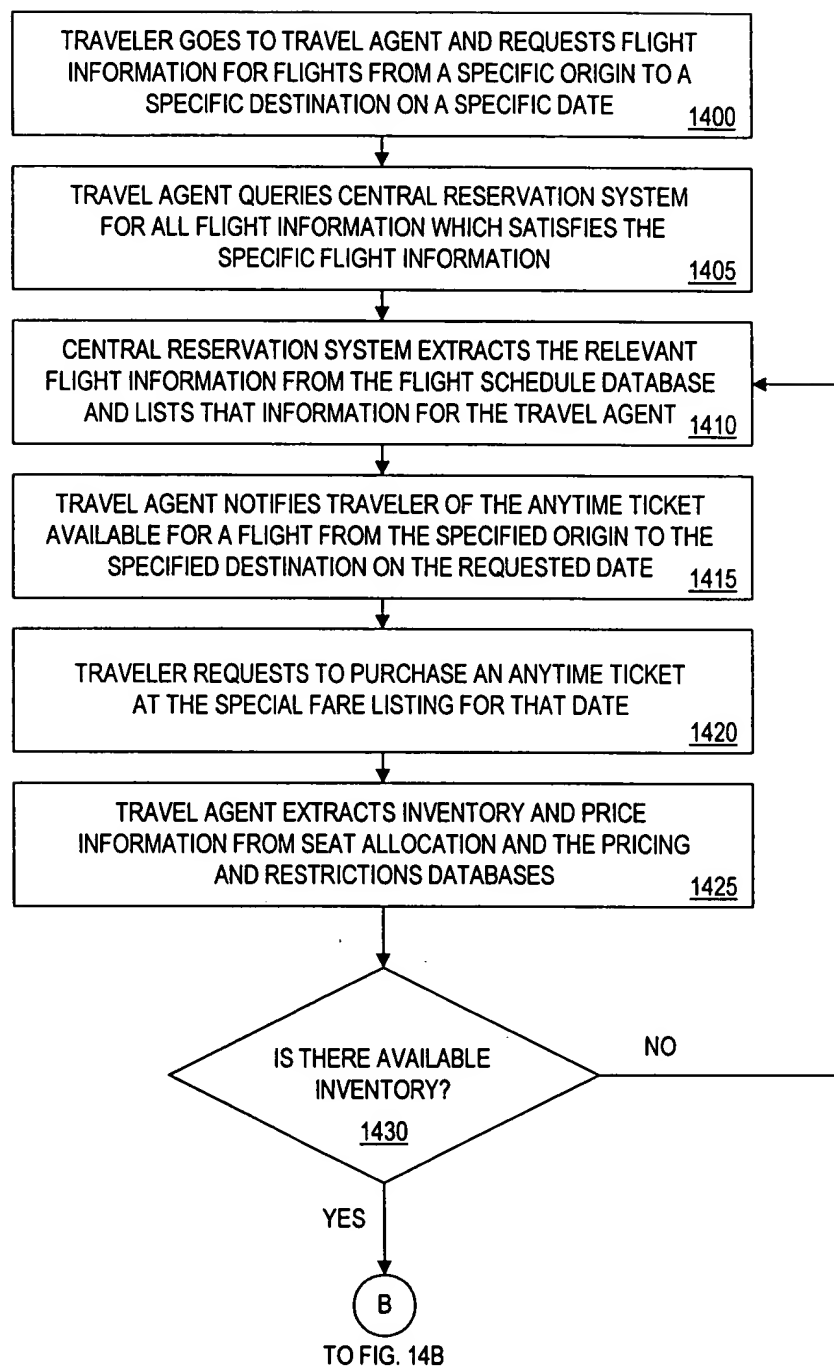


FIG. 14A

FROM FIG. 14A

B

TRAVEL AGENT CREATES PASSENGER NAME RECORD
AND RESERVES A SEAT AT THE SPECIAL FARE LISTING FOR
THAT ROUTE ON THE GIVEN DATE IN THE CENTRAL
RESERVATION SYSTEM

1435

RESERVATION IS STORED IN THE RESERVATION DATABASE

1440

CRS MODIFIES THE RECORD FOR THE SPECIAL FARE
LISTING IN THE SEAT ALLOCATION DATABASE BY
DECREMENTING THE "REMAINING INVENTORY" BY "1" AND
INCREMENTING THE "TOTAL INVENTORY BOOKED" BY "1"

1445

CENTRAL RESERVATION SYSTEM RECEIVES THE ACTUAL
FLIGHT INFORMATION INCLUDING FLIGHT NUMBER AND
DEPARTURE TIME IN REAL TIME AND DISPLAYS IT FOR
THE TRAVEL AGENT

1446

CENTRAL RESERVATION SYSTEM ACCESSES THE SEAT
ALLOCATION DATABASE AND UPDATES THE RECORDS
FOR THE ACTUAL FLIGHT AND THE SPECIAL
FARE LISTING ACCORDINGLY

1448

TRAVELER PURCHASES TICKET AND IS IMMEDIATELY
NOTIFIED BY THE TRAVEL AGENT OF THE ACTUAL
FLIGHT INFORMATION

1450

TRAVELER RECEIVES AIRLINE TICKET FOR THE ACTUAL FLIGHT

1455

FIG. 14B

00000000 56495 030300

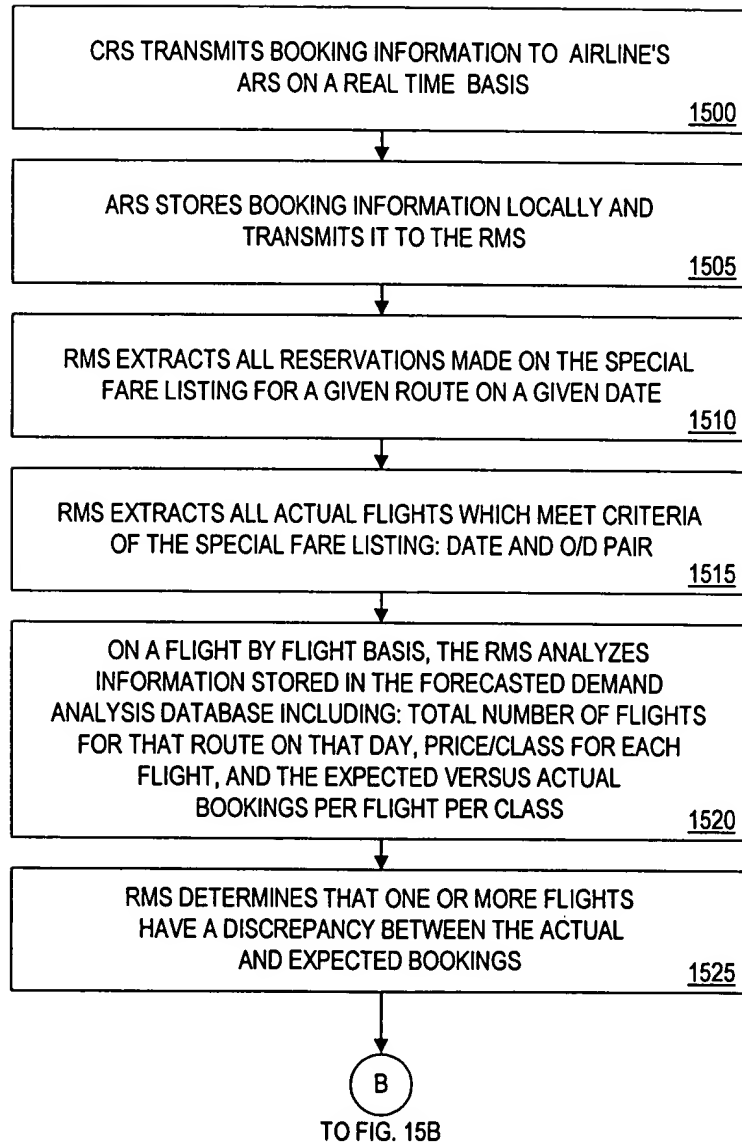


FIG. 15A

B



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